

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

OCT 0 8 2002

Serial No.:

09/613,591

Group Art Unit No.: 1647 TECH CENTER 1600/2900

Filed:

July 10, 2000

Examiner: R. Deberry

For:

COMBINATION THERAPY FOR CONDITIONS

LEADING TO BONE LOSS

Docket No.: A-378CIP5

# TERMINAL DISCLAIMER TO OBVIATE A PROVISIONAL DOUBLE PATENTING REJECTION OVER A PENDING APPLICATION

**Assistant Commissioner For Patents** Washington, D.C. 20231

Sir:

Petitioner, Amgen Inc., is the owner of the entire interest in the instant application.

Petitioner hereby disclaims the terminal part of any patent granted on the above-identified application, which would extend beyond the expiration date of the full statutory term as presently shortened by any terminal disclaimer of any patent issuing from Patent No. 6,288,032, and hereby agrees that any patent so granted on said above-identified application shall be enforceable only for and during such period that the legal title to said patent shall be the same as the legal title to any patent issuing from Patent No. 6,288,032, this agreement to run with any patent granted on said above-identified application and to be binding upon the grantee, its successors, or assigns.

Petitioner does not disclaim any terminal part of any patent granted on said above-identified application that would extend to the full statutory term as presently shortened by any terminal disclaimer of any patent issuing from Patent No. 6,288,032 in the event that any said patent issuing from Patent No. 6,288,032 later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321(a), has all claims canceled by a reexamination certificate, is reissued, or is otherwise terminated prior to the expiration of its statutory term as presently shortened by any terminal disclaimer, except for the separation of legal title stated above.

erminal disclaimer, except for the separation of legal title stated above.

Copies of the assignment documents in the chain of title from the original owner to assignee are attached. and were recorded in the Patent and Trademark Office at reel 011607 and frame 0444

p	chain of title from the original owner to assignee are attached?	
and were recorded in the Patent and Trademark Office	e) at reel <u>011607</u> and frame <u>0444</u>	3
undersigned's knowledge and belief, title is in the assi	d assignment documents and certifies that, to the best of the gnee identified above.	000000000000000000000000000000000000000
EXPRESS MAIL	, CERTIFICATE	§
*Express Mail* mail labeling number: <u>EL360691385US</u> I hereby certify that this paper or fee is being deposited with the United States Postal Service *Expres addressed to Commissioner of Patents and Trademarks, Washington, D.C. 20231.	Date of Deposit: October 2, 2002  SS Mail PostOffice to Addressee* service under STC.F.R. 1.10 on the date indicated above and is  While I SUCASO (A. 1.10) on the date indicated above and is	13/10/2002 STRRTHEL

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,

Timothy J Gadl
Attorney for Applicants
Registration No.: 33,111

Phone: (805) 447-2688 Date: October 2, 2002

Please send all future correspondence to:

US Patent Operations/ [TJG]
Dept. 4300, M/S 27-4-A
AMGEN INC.
One Amgen Center Drive
Thousand Oaks, California 91320-1799





**PTAS** 

UNITED STATE: JEPARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMMISSIONER

OF PATENTS AND TRADEMARKS Washington, D.C. 20231

MAY 29, 2001

AMGEN INC. U.S. PATENT OPERATIONS/TJG DEPT. 4300, M/S 27-4-A ONE AMGEN CENTER DRIVE THOUSAND OAKS, CA 91320-1799



\*101647117A\* JUN - 4 2001 PATENT OPERATIONS AMGEN

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/06/2001

REEL/FRAME: 011607/0444

NUMBER OF PAGES: 13

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

BOYLE, WILLIAM J.

DOC DATE: 10/03/2000

ASSIGNOR:

LACEY, DAVID LEE

DOC DATE: 10/03/2000

ASSIGNOR:

CALZONE, FRANK J.

DOC DATE: 10/03/2000

ASSIGNOR:

CHANG, MING-SHI

DOC DATE: 10/16/2000

ASSIGNOR:

SENALDI, GIORGIO

DOC DATE: 10/03/2000

ASSIGNEE:

AMGEN INC. DEPT. 4300, M/S 27-4-A ONE AMGEN CENTER DRIVE THOUSAND OAKS, CALIFORNIA 91320-

1799

011607/0444 PAGE 2

SERIAL NUMBER: 09613591

PATENT NUMBER:

FILING DATE: 07/10/2000

ISSUE DATE:

PEARLENE FOSTER, PARALEGAL ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Timothy J. Gaul

Name of Person Signing

Date

Total number of pages including cover sheet, attachments, and document:

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**CERTIFICATE OF MAILING** 

ioner for Patents, Washington, D.C. 20231, on the date appearing below

28

### **ASSIGNMENT**

Whereas, I, William J. Boyle, 11678 Chestnut Ridge Street, Moorpark, California 93021		
	David Lee Lacey, 614 Paseo Vista, Newbury Park, California 91320	
	Frank J. Calzone, 841 Pine Crest Circle, Westlake Village, California 91361	
	Ming-Shi Chang, 3rd Floor, No. 58, Tong-Ning Road, Tainan, Taiwan	
	Giorgio Senaldi, 2846 White Ridge Place, Thousand Oaks, California 91362	
("Application") er	rention which is the subject of an application for Letters Patent of the United States  OMBINATION THERAPY FOR CONDITIONS LEADING TO BONE LOSS	
which is found in:	•	
☐ (a)	the U.S. Patent Application executed on even date herewith;	
(b)	the U.S. Patent Application executed on	
	U.S. Application Serial No.: 09/613,591 filed on July 10, 2000	
☐ (d)	U.S. Patent No.:	

Whereas AMGEN INC., a Delaware corporation having its principal place of business at One Amgen Center Drive, Thousand Oaks, California 91320-1799 wishes to acquire the entire interest in all inventions disclosed in such Application:

Now, therefore, in consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell, assign, transfer and set over unto AMGEN INC., its successors and assigns (collectively "AMGEN") my entire right, title and interest in, to and under the Application, and any provisional application(s) from which Application is derived, and all priority rights to which the Application may be entitled, including all priority rights for other countries arising therefrom, all inventions therein disclosed, and any and all Letters Patent of the United States and of all other countries which may be granted for such inventions, or any of them, including divisional, continuation, and/or continuation-in-part applications based on the above-identified Application, all such inventions and all rights in such Application and Letters Patent to be held and enjoyed by AMGEN for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.

Further, I hereby sell, assign, transfer, and set over unto AMGEN my entire right, title and interest in or to the right to refer to, to access, and to control microorganism(s) or other biological material(s) related to the Application and which are deposited by me or at my direction or deposited on my behalf by Amgen, its affiliates, employees or employees of its affiliates. The transfer of such right, title and interest includes, without limitation, my unreserved and irrevocable consent and authorization to AMGEN to refer to the deposited microorganisms(s) or other biological materials(s) in the Application and the right to make available to the public the deposited material in accordance with the laws, treaties, statutes, rules, regulations and the like of the United States, all other countries, and any patent granting authority or organization.

I authorize and request the Commissioner of Patents and Trademarks of the United States to issue any such Letters Patent which may be granted on the Application to AMGEN as assignee of the entire right, title and interest therein and thereto.

For myself and for my legal representatives, I covenant and agree with AMGEN that I have not granted to any others any license to make, use or sell any such inventions, that my right, title and interest in such inventions has not been encumbered, that I have good right and title to sell and assign the same, and that I will not execute any instrument in conflict herewith.

For myself and for my heirs, successors and legal representatives, I further covenant and agree with AMGEN that upon request I and they will: (i) execute continuing, divisional, or reissue applications, amended specifications, or rightful declarations or oaths; (ii) communicate to AMGEN any facts known to me or them relating to such inventions or the history thereof; (iii) execute preliminary statements and testify in any interference proceedings or litigation; (iv) execute and deliver any application papers, assignments, or other instruments; and (v) do all other acts which, in the opinion of counsel for AMGEN, may be necessary or desirable to secure the grant of Letters Patent to AMGEN or its nominees, in the United States and in all other countries where AMGEN may desire to have such inventions, or any of them, patented, with specifications and claims in such form as shall be approved by counsel for AMGEN and to vest and confirm in AMGEN or its nominees the full and complete legal and equitable title to all such Letters Patent, without further consideration than that now paid but at the expense of AMGEN.

In Witness Whereof I have exe	cuted this assignment on the day of october 2000.
William J. Boyle	-/illi-1/2/3/6-
(Name of Inventor)	(Signature of Inventor)
State of California County of Ventura ss:	JNITED STATES OF AMERICA  Gelober 3 2000
Defe No. Dans	
· ·	Ventura County, State of California, personally appeared
William J. Boyle	
personally known to me - OR -  CHPISTINA A. GUTIERREZ Commission # 1200954	proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.  WITNESS my hand and official seal.
Nertura County  My Comm. Expires Nov 6, 2002	Notary Public
Samuel St. Comments of Comment	My commission expires
	ν

In Witness Whereof I have exec	tuted this assignment on the 3 day of October 20 00
David Lee Lacey	
(Name of Inventor)	(Signature of Inventor)
State of California	NITED STATES OF AMERICA
County of Ventura } ss:	•
	<u>October 3 2000</u>
David Lee Lacey    David Lee Lacey   David Lee L	proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted executed the instrument.
	WITNESS my hand and official seal.
	Christing a. Hutura
	Notary Public 3
CHRISTINA A. GUTIERREZ Commission # 1200954 Norany Public — California Ventura County My Comm. Braires Nov 6, 2002	My commission expires

In Witness Whereof I have execu	uted this assignment on the 3 day of October 20 00
Frank J. Calzone	Fruit Cohan
(Name of Inventor)	(Signature of Inventor)
State of California County of Ventura State of California	IITED STATES OF AMERICA
Before me a Notany Public for N	/entura County, State of California, personally appeared
Frank J. Calzone	relitura County, State of Camornia, personally appeared
personally known to me - OR -	proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
	WITNESS my hand and official seal.
CHRISTINA A. GUTIERREZ Commission # 1200954 Porcay Public — Colifornia Ventura County	Notary Public  My commission expires  November 6 2002

	In Witness Whereof I have	executed this	s assignment on the	day of	<u>20 00</u>
	Ming-Shi Chang	• .			
	(Name of Inventor)			(Signature of Inventor)	
State of County of	, ss:	UNITED S	STATES OF AMERICA	<b>.</b>	
	л. <b>ј</b>				<u>20</u> 00
<del></del>	Before me, a Notary Public Ming-Shi Chang	for	County, State of	, personally appeared	
perso	onally known to me - OR -	whose ackno author the pe execu	name is subscrib wledged to me that ! rized capacity, and that	is atisfactory evidence to be led to the within instru- ne/she executed the same by his/her signature on the loon behalf of which the per lial seal.	ment and in his/her instrument
			<u> </u>	Notary Public	·
			N	fy commission expires	
			<del></del>		

•	-
In Witness Whereof I have exec	cuted this assignment on the 3 day of October 20 00
Giorgio Senaldi	Since de 1
(Name of Inventor)	(Signature of Inventor)
U	NITED STATES OF AMERICA
State of California County of Ventura State of California County of Ventura	er seu.
	October 3 2000
Before me, a Notary Public for	Ventura County, State of California, personally appeared
Giorgio Senaldi	y, same or camorina, percentary appeared
personally known to me - OR -	proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
	WITNESS my hand and official seal.
Chaistina A. Gutierrez Commission # 1200954 Novary Public — California Ventura County	Notary Public  My commission expires

### **ASSIGNMENT**

Where	as, I, William J. Boyle, 11678 Chestnut Ridge Street, Moorpark, California 93021
	David Lee Lacey, 614 Paseo Vista, Newbury Park, California 91320
	Frank J. Calzone, 841 Pine Crest Circle, Westlake Village, California 91361
	Ming-Shi Chang, 3 <sup>rd</sup> Floor, No. 58, Tong-Ning Road, Tainan, Taiwan
	Giorgio Senaldi, 2846 White Ridge Place, Thousand Oaks, California 91362
("Application") e	vention which is the subject of an application for Letters Patent of the United States  OMBINATION THERAPY FOR CONDITIONS LEADING TO BONE LOSS
which is found in:	-
☐ (a)	the U.S. Patent Application executed on even date herewith;
(b)	the U.S. Patent Application executed on
<b>⊠</b> (c)	U.S. Application Serial No.: 09/613,591 filed on July 10, 2000
(d)	U.S. Patent No.:

Whereas AMGEN INC., a Delaware corporation having its principal place of business at One Amgen Center Drive, Thousand Oaks, California 91320-1799 wishes to acquire the entire interest in all inventions disclosed in such Application:

Now, therefore, in consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell, assign, transfer and set over unto AMGEN INC., its successors and assigns (collectively "AMGEN") my entire right, title and interest in, to and under the Application, and any provisional application(s) from which Application is derived, and all priority rights to which the Application may be entitled, including all priority rights for other countries arising therefrom, all inventions therein disclosed, and any and all Letters Patent of the United States and of all other countries which may be granted for such inventions, or any of them, including divisional, continuation, and/or continuation-in-part applications based on the above-identified Application, all such inventions and all rights in such Application and Letters Patent to be held and enjoyed by AMGEN for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.

Further, I hereby sell, assign, transfer, and set over unto AMGEN my entire right, title and interest in or to the right to refer to, to access, and to control microorganism(s) or other biological material(s) related to the Application and which are deposited by me or at my direction or deposited on my behalf by Amgen, its affiliates, employees or employees of its affiliates. The transfer of such right, title and interest includes, without limitation, my unreserved and irrevocable consent and authorization to AMGEN to refer to the deposited microorganisms(s) or other biological materials(s) in the Application and the right to make available to the public the deposited material in accordance with the laws, treaties, statutes, rules, regulations and the like of the United States, all other countries, and any patent granting authority or organization.

I authorize and request the Commissioner of Patents and Trademarks of the United States to issue any such Letters Patent which may be granted on the Application to AMGEN as assignee of the entire right, title and interest therein and thereto.

For myself and for my legal representatives, I covenant and agree with AMGEN that I have not granted to any others any license to make, use or sell any such inventions, that my right, title and interest in such inventions has not been encumbered, that I have good right and title to sell and assign the same, and that I will not execute any instrument in conflict herewith.

For myself and for my heirs, successors and legal representatives, I further covenant and agree with AMGEN that upon request I and they will: (i) execute continuing, divisional, or reissue applications, amended specifications, or rightful declarations or oaths; (ii) communicate to AMGEN any facts known to me or them relating to such inventions or the history thereof; (iii) execute preliminary statements and testify in any interference proceedings or litigation; (iv) execute and deliver any application papers, assignments, or other instruments; and (v) do all other acts which, in the opinion of counsel for AMGEN, may be necessary or desirable to secure the grant of Letters Patent to AMGEN or its nominees, in the United States and in all other countries where AMGEN may desire to have such inventions, or any of them, patented, with specifications and claims in such form as shall be approved by counsel for AMGEN and to vest and confirm in AMGEN or its nominees the full and complete legal and equitable title to all such Letters Patent, without further consideration than that now paid but at the expense of AMGEN.

In Witness Whereof I have e	xecuted this assignment on the
William J. Boyle	-/illi-//2/3/6-
(Name of Inventor)	(Signature of Inventor)
State of California County of Ventura State of California	UNITED STATES OF AMERICA
·	October 3 2000
Before me, a Notary Public for William J. Boyle	or Ventura County, State of California, personally appeared
personally known to me - OR -	proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
CHPISTINA A. GUTIERREZ Commission # 1200954  Wentura County My Comm. Excites Nov 6, 2002	WITNESS my hand and official seal.  Observation O. Musturing  Notary Public  My commission expires
	My commission expires
	Y \ max. \ \ \ \ 200.3

in Witness Whereof I have execu	uted this assignment on the 3 day of October 20 00
David Lee Lacey	
(Name of Inventor)	(Signature of Inventor)
	• • •
	IITED STATES OF AMERICA
State of California County of Ventura State of California County of Ventura	
•	<u>October 3 20 00</u>
Before me, a Notary Public for V  David Lee Lacey	entura County, State of California, personally appeared
personally known to me - OR -	proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
,	WITNESS my hand and official seal.
	Orristic a. Huteris Notary Public
CHPISTINA A. GUTTERREZ Commission # 1200954 Norary Public — California Ventura County	My commission expires  Novembers 4 2002

In Witness Whereof I have exec	uted this assignment on the 3 day of October 20 00
Frank J. Calzone	Fruit Colyan
(Name of Inventor)	(Signature of Inventor)
	NITED STATES OF AMERICA
State of California County of Ventura State of California County of Ventura	
•	October 3 20 00.
Before me, a Notary Public for	Ventura County, State of California, personally appeared
Z personally known to me - OR - ☐	proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted executed the instrument.
	WITNESS my hand and official seal.
	Christia A. Hutiosas Notary Public
CF-PISTINA A. GUTIERREZ Commission # 1200954 PARTICIPY Public — Colifornia Ventura County My Comm. Excires Nov 6, 2002	My commission expires

In Witness Whereof I have execu	ted this assignment on the	16 th day of <u>Getter</u> 20 00  (Signature of Inventor)
Ming-Shi Chang	Thi	MSLS Chang
(Name of Inventor)		(Signature of Inventor)
State of City of Keohating (States) as County of Keohating (States) as County of Keohating (States) (States)	ITED STATES OF AMERICA	
•		1997 2000 <u>20</u> 00
Before me, a Notary Public for	County, State of	, personally appeared
Ming-Shi Chang	<del>_</del>	
personally known to me - <b>OR</b> - □ □	whose name is subscrib acknowledged to me that authorized capacity, and tha	f satisfactory evidence to be the person bed to the within instrument and he/she executed the same in his/he t by his/her signature on the instrument oon behalf of which the person acted
	WITNESS my hand and office	ial seal. W. Leul
		Notary Public
	David W. Sec	My commission expires
•	Special Notas	ry (PL95-8) and qualified

In Witness Whereof I have exec	cuted this assignment on the
Giorgio Senaldi	Singelinel
(Name of Inventor)	Signature of Inventor)
·	NITED STATES OF AMERICA
State of California County of Ventura ss:	er endig
	October 3 20 00
Before me, a Notary Public for	Ventura County, State of California, personally appeared
Giorgio Senaldi	
personally known to me - OR -	whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/hear authorized capacity, and that by his/hear signature on the instrument
	proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.  WITNESS my hand and official seal.